IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Rinehart et al.

EXAMINER:

Gitomer

SERIAL NO.:

to be assigned

GROUP:

1623

FILED:

to be assigned

FOR:

Metabolites of Ecteinascidin 743 Formed by Human

Cytochrome CYP3A4 (as amended)

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, DC 20231 BOX NEW APPLICATION

Sir:

PRELIMINARY AMENDMENT AND INFORMATION DISCLOSURE STATEMENT

This application is a Continuation/Divisional Application based upon pending application U.S.S.N. 09/309,947, filed 11 May 1999. Please amend the attached copy of that application as follows:

IN THE TITLE:

Please amend the Title to read as follows:

-- Metabolites of Ecteinascidin 743 Formed by Human Cytochrome CYP3A4--

IN THE CLAIMS:

After the granting of the filing date for this continuation/divisional application, please cancel original claims 1-16 and enter the following new claims herein:

17. Metabolites of Ecteinascidin 743 formed by human cytochrome CYP3A4, said metabolites being selected from the group consisting of:

- 18. The Ecteinascidin 743 metabolite of Claim 17, designated herein as ETM-305.
- 19. The Ecteinascidin 743 metabolite of Claim 17, designated herein as ETM-204.
- 20. A pharmaceutical composition comprising one or more of the Eceteinascidin 743 metabolites of Claim 17 and a pharmaceutically acceptable diluent, excipient or carrier.
 - 21. The pharmaceutical composition of Claim 20, wherein the

Ecteinascidin 743 metabolite is designated herein as ETM-305.

- 22. The pharmaceutical composition of Claim 20, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.
- 23. A method of treating mammalian leukemia in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

ETM 204

or mixtures thereof.

24. The method of claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.

- 25. The method of Claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.
- 26. The method of Claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.
- 27. A method of treating mammalian lung carcinoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

or mixtures thereof.

28. The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.

- 29. The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.
- 30. The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.
- 31. A method of treating mammalian colon adenocarcinoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

H₃C
$$\overset{\circ}{\oplus}$$

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ETM 775

- 32. The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.
- 33. The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.
- 34. The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.
- 35. A method of treating mammalian malignant melanoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

ETM 305

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ETM 775

- 36. The method of claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.
- 37. The method of Claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.
- 38. The method of Claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.
- 40. A method of assaying the human cytochrome CYP3A4 metabolism of Ecteinascidin 743, comprising monitoring a test sample for the presence of one or more metabolites selected from the group consisting of ETM-204, ETM-305 and ETM-775.

REMARKS

Applicant respectfully submits this Preliminary Amendment and Information Disclosure Statement in connection with the filing of this Continuation/Divisional Application based upon copending application U.S.S.N. 09/309,947, filed 11 May 1999.

The Title of the Invention has been amended to reflect the claims submitted herein, each of which is fully supported by the original disclosure. Entry of this amendment is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

INFORMATION DISCLOSURE STATEMENT

In accordance with the provisions of 37 C.F.R. §§1.56 and 1.97, Applicant herewith submits the publications and/or patents shown on the attached form PTO-1449, for consideration by the Examiner in connection with the examination of the above-identified patent application.

It is respectfully requested that each of the documents shown on the attached form(s) PTO-1449 be made of record in this application. Copies of these documents are in the file of the parent application, Serial No. 09/309,947, filed 11 May 1999, and are thus not being resubmitted herein.

Early examination and allowance of the present application are respectfully solicited.

Respectfully submitted,

Ernest V. Linek (Reg. No. 29,822)

Attorney for Applicant

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Date: October 3, 2001

Document No. 14005

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE TITLE:

The Title was amended as follows:

Metabolites of Ecteinascidin 743 Formed by Human Cytochrome CYP3A4

IN THE CLAIMS:

Original claims 1-16 were canceled.

New claims 17-40 have been added, as follows:

-- 17. (New) Metabolites of Ecteinascidin 743 formed by human cytochrome CYP3A4, said metabolites being selected from the group consisting of:

ETM 305

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ETM 775

- -- 18. (New) The Ecteinascidin 743 metabolite of Claim 17, designated herein as ETM-305.--
- -- 19. (New) The Ecteinascidin 743 metabolite of Claim 17, designated herein as ETM-204.--
- -- 20. (New) A pharmaceutical composition comprising one or more of the Eceteinascidin 743 metabolites of Claim 17 and a pharmaceutically acceptable diluent, excipient or carrier.--
- -- 21. (New) The pharmaceutical composition of Claim 20, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.--
- -- 22. (New) The pharmaceutical composition of Claim 20, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.--
- -- 23. (New) A method of treating mammalian leukemia in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

- -- 24. (New) The method of claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.--
- -- 25. (New) The method of Claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.--
- -- 26. (New) The method of Claim 23, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.--
- -- 27. (New) A method of treating mammalian lung carcinoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

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 $\stackrel{\bigcirc}{\rightarrow}$ $\stackrel{\rightarrow}{\rightarrow}$ $\stackrel{\bigcirc}{\rightarrow}$ $\stackrel{\rightarrow}{\rightarrow}$ $\stackrel{\rightarrow}{\rightarrow}$

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- -- 28. (New) The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.--
- -- 29. (New) The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.--
- -- 30. (New) The method of Claim 27, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.--
- -- 31. (New) A method of treating mammalian colon adenocarcinoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

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H₃C
$$\overset{\text{OCH}_3}{\oplus}$$

ETM 204

ETM 775

- -- 32. (New) The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.--
- -- 33. (New) The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.--
- -- 34. (New) The method of Claim 31, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.--
- -- 35. (New) A method of treating mammalian malignant melanoma in patients in need of such treatment, said method comprising administering an effective amount of a metabolite of Ecteinascidin 743 formed by human cytochrome CYP3A4 to said patient in unit dosage form, said metabolite being selected from the group consisting of:

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H₃C
$$\stackrel{OCH_3}{+}$$

ETM 775

ETM 204

- 36. (New) The method of claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-305.--
- 37. (New) The method of Claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-204.--
- 38. (New) The method of Claim 35, wherein the Ecteinascidin 743 metabolite is designated herein as ETM-775.--
- 40. (New) A method of assaying the human cytochrome CYP3A4 metabolism of Ecteinascidin 743, comprising monitoring a test sample for the presence of one or more metabolites selected from the group consisting of ETM-204, ETM-305 and ETM-775.--